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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,087	03/12/2004	Christopher Alan Arms	4041A-000019	8673
27572	7590	07/03/2006		
HARNESSE, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303				
			EXAMINER	
			DICUS, TAMRA	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/800,087	Applicant(s) ARMS ET AL.	
	Examiner Tamra L. Dicus	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03-31-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Cancellation of claims 1-7 and 15-19 are acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 9-14, 22-23, and 25-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The Examiner believes that independent claims 8 (original) and 20 (new) do not have the proper support in the original specification as filed because the specification does not provide any teaching or discussion on how to make the outer boundary sloping or gradually increasing or its usage with Applicant's claimed viewed component. Thus one having ordinary skill would not know how to produce this effect. See Applicant's [0014] and [0016] to "a downward force" reducing the height of some of the dots along the outer boundary forming the slope or gradual progression, however, "a downward force" is too vague to set forth how to specifically make the claimed invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1774

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-14, and 20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,266,427 to Iwase et al.

Iwase teaches a display board comprising a transparent substrate of polycarbonate (1, FIG. 9 and associated text and 3:60-68, planar sheet), white layer (31, FIG. 9 and associated text, intermediate layer) and a picture pattern layer (3, FIG 9 and associated text) composed of transparent photopolymerization resin 2 such as an epoxy acrylate having coloring dot shaped agents that are yellow, magenta, cyan, and black ink of red layer (32, FIG. 9 and associated text, underlying and first layers) and black layer (33, FIG. 9 and associated text, outer and second layers) is gradually shaped over (32, FIG. 9 and associated text, see height difference as shown same as Applicant's [0014-0016] description in the instant specification equating to profile, slope, or graduation) via screen printing process (instant claims 8-14, 20-26). See Abstract, 1:10-15, 3:55- 4: 40, 6: 1-21, 8: 20-26, and 11:14-66.

To claim 23, the cylindrical shape is the same as the same screen printing process is taught.

Claims 8-9, 11, 13-14, 20-21, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,247,429 to Iwase et al.

Iwase teaches a display board panel with a transparent substrate film of polycarbonate (2:10-50), an opaque black layer of printed dot toners (3:30-45) on the base film in patterns (see 21, FIGS. 3 and 4 and associated text). Iwase teaches silver dot layer (21, FIG. 3 and associated text, underlying and first layers) and 32 black screen-printed dot layer (32, FIG. 3 and associated

Art Unit: 1774

text, outer and second layers) having thickness requirements shown in FIG. 3. Claims 8-9, 11, 13-14, 20-21, and 24 are met.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 22-23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,247,429 to Iwase et al.

Iwase essentially teaches the claimed invention, but does not explicitly disclose a profile, slope, or gradual progression as claimed per claims 10, 22-23, and 25-26.

Iwase teaches the density changes (2:30-35) when using the white and black color dots (embraces slope and gradual progression) being backlit (Abstract).

It would have been obvious to one having ordinary skill in the art to have modified the viewed component of Iwase to have dots change slope, profile, or gradual progression as recited because Iwase teaches Iwase teaches the density changes when using the white and black color dots (embraces slope and gradual progression) being backlit (2:30-35, Abstract). Further, Iwase teaches the number of rows and interval between adjacent dots becomes small and the are of the dot is reduced (slope and profile) effect the density and thus is an optimal feature, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272.

References of Interest

The remaining references listed on form(s) 892 and/or 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

- USPN 6663,252 to Fong et al. teaches a display board panel having printed on a clear plastic substrate in parallel and mixed fashion, translucent white ink forming a translucent surface (4:30-45, equivalency to transparent ink) and a dark layer of ink is also adjacent printed in designs such as concentric circles and starburst effects (4: 49-60, overlapping), scales, and indicators (See FIGS 1-2, 4:40-53).

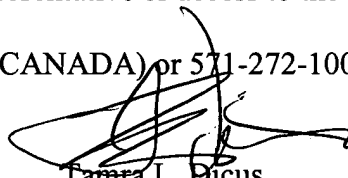
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

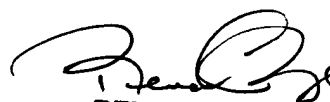
Art Unit: 1774

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tamra L. Dicus
Examiner
Art Unit 1774

June 21, 2006



RENA DYE
SUPERVISORY PATENT EXAMINER

A.U. 1774 6/23/06